

REMARKS/ARGUMENTS

In the Official Office Action of September 29, 2008, the Examiner has objected to claims 2 and 12 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly pointing out and distinctly claim the subject matter of the invention. Specifically, it was stated that there was no antecedent basis for "said lower melting point high-thermal conductor" nor for "said higher melting point room temperature magnetic refrigerant material". Accordingly, Applicant has amended claim 2 to state that the melting point of the high-thermal conductor compound can be higher or lower than the melting point of the room temperature magnetic refrigerant material compound. Then, as subsequently set forth in claim 2, the lower melting point compound, be it the high-thermal conductor or the room temperature refrigerant material, is melted with subsequently the higher melting point compound being added to the melted compound, and the like. Accordingly, it has been deemed that the 112 rejection has been rendered moot by the amendments of claim 2.

Claim 2 has also been objected to as lacking antecedent basis for "the metal" in line 14 of the claim. Applicant has deleted the words -- metal fluid -- and thus it is submitted that the 112 rejection has been obviated.

In the Official Action of September 29, 2008, the Examiner has rejected claim 1 under 35 USC 102(a) as being anticipated by Wada et al (WO 03/009314A1) and also under 35 U.S.C. 102(e) as being anticipated by US 6,826,915 to Wada et al. It is stated by the Patent Office that the Wada references disclose a composite material including a high-thermal-conductor and a room temperature magnetic refrigerant material wherein the refrigerant material is nested with the high-thermal-conductor to obtain a composite material. However, it is stated that claims 2 and 12 would be allowable if rewritten to overcome the 35 U.S.C. 112, second paragraph rejections.

Accordingly, Applicant has amended claim 1 by inserting the limitations of claim 2 that the room temperature refrigerant material or high-thermal conductor is processed into particles, sheets, strips, or filament having a minimal sectional size of from 0.001 mm to 0.1 mm. Basis of support for the value of 0.1 mm is at least set forth in original and pending claims 7 and 8. The small size of the particles, sheets, strips, or filaments of 0.1 mm is advantageous since the heat generated by the magnetic refrigerant material can be easily transferred through the high-thermal conductor. In contrast, the Wada references state that the thickness of each layer of the magnetic refrigerant material is 5 mm, see FIG. 9, and thus the heat generated by such magnetic refrigerant material cannot be transferred out through a high-thermal conductor mesh. A fortiori, the meshes utilized in Wada are not a high-thermal conductor.

In view of the above amendments and arguments, a formal notice of allowance of claims 1-4 and 6-12 is earnestly solicited.

Respectfully submitted,

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